

## © WPI / DERWENT

- AN - 1997-412797 [38]
- TI - Conveyance appts of semiconductor wafer, LCD substrate, electronic circuit substrates - has linear rotary transmission unit which perform parallel shifting of workpiece holding member such that shifting locus of holding members for nearer to each other
- AB - J09186216 The appts has a pair of transport mechanism connected to a rotary base (10) using a first pair of parallel links (16,18). Workpiece holding member (24,26) are connected to the transport mechanism using a second pair of parallel links (20,22).
- A drive unit drives the parallel links and the transport mechanism transfers the oscillating the first parallel link to the second parallel link. A linear rotary transmission unit coupled to end of second pair of parallel links performs parallel shifting of workpiece holding member, so that shifting locus of both workpiece holding member are nearer to each other.
  - ADVANTAGE - Raises conveyance speed. Simplifies structure of drive system. Enables conveyance without position modification of workpiece.
  - (Dwg.1/7)
- IV - CONVEY APPARATUS SEMICONDUCTOR WAFER LCD SUBSTRATE  
ELECTRONIC CIRCUIT SUBSTRATE LINEAR ROTATING TRANSMISSION  
UNIT PERFORMANCE PARALLEL SHIFT WORKPIECE HOLD MEMBER SHIF  
LOCUS HOLD MEMBER NEARBY
- PN - JP9186216 A 19970715 DW199738 H01L21/68 007pp
- IC - B25J9/06 ;B65G49/07 ;H01L21/68
- MC - U11-F02A1 U14-K01A5
- DC - P62 Q35 U11 U14
- PA - (SONY.) SONY CORP
- AP - JP19950353996 19951227
- PR - JP19950353996 19951227

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-186216  
 (43)Date of publication of application : 15.07.1997

(51)Int. Cl. H01L 21/68  
 B25J 9/06  
 B65G 49/07

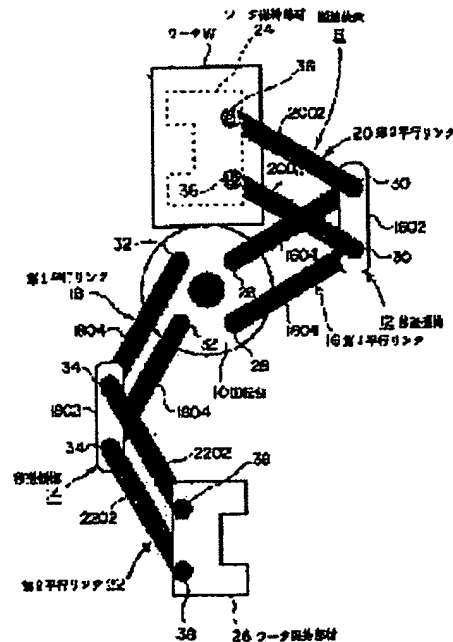
(21)Application number : 07-353996 (71)Applicant : SONY CORP  
 (22)Date of filing : 27.12.1995 (72)Inventor : KIKUCHI KAZUO

## (54) TRANSFER DEVICE

## (57)Abstract:

PROBLEM TO BE SOLVED: To enable two works to be transferred in two different directions at the same time at a high transfer rate with no change in attitude by a method wherein the works are rectilinearly moved in parallel through a combination of parallel links and interaction between the parallel links and a rotary transmission means.

SOLUTION: When works are moved, second parallel links 20 and 22 and work holding members 24 and 26 comprised in moving mechanisms 12 and 14 are made to deviate from each other in a vertical direction so as not to interfere with each other, so that the work holding member 24 is smoothly moved, and a work can be surely transferred in two directions between two stations. As a work is transferred between two stations along a straight line connected between them at a shortest distance, a transfer speed is shortened, and rotary pad 10 can be dispensed with if a transfer direction is previously set. Therefore, the work holding members 24 and 26 are rectilinearly and parallel moved, so that the works W transferred with the work holding members 24 and 26 are kept constant in position, and a processing device or a treatment device can be made simple in structure.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's  
decision of rejection]

[Kind of final disposal of application  
other than the examiner's decision of  
rejection or application converted  
registration]

[Date of final disposal for